

## COMMENTARY

## Sleep Routines in Children

Covington et al. Toddler bedtime routines and associations with nighttime sleep duration, and maternal and household factors. *J Clin Sleep Med*. 2019;15(6):865–871.

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Striking the optimal balance between work, social life and family demands is a challenging task, particularly for single parents and families with dual-earning parents. Parental responsibilities are extensive and require much time and effort. Given the essential role that sleep plays in children's health, performance and wellbeing, it is the caregiver's responsibility to ensure children achieve sufficient sleep. Previous work has shown that parental behaviors and interventions that promote independent sleep practices and self-soothing in children 0–3 years are associated with more desirable sleep outcomes.<sup>1</sup> However, many face difficulties with bedtimes and sleep initiation with children. Sleep resistance in toddlers is common but is often driven by behavior, as noted in a recent article which recommended exercising consistent bedtime routines for management of pediatric sleep problems.<sup>2</sup> Moreover, parenting practices and parental sleep patterns have been significantly associated with their child's sleep duration.<sup>3</sup> Consistent and repetitive behaviors are fundamental establishing routines, as well as for habit formation. Cue recognition for sleepiness can also be incorporated into bedtime routines and help to promote sleep initiation. Previous work has shown that a consistent bedtime routine for children 0–5 years is associated with more desirable sleep outcomes both for the child as well as the parents.<sup>4</sup> Differences in sleep outcomes and bedtime routines have been documented between lower income, minority families compared to Caucasians with a higher socioeconomic status in the United States.<sup>5</sup> Causal factors which explain these observations are currently limited.

In this issue of the *Journal of Clinical Sleep Medicine*, Covington and colleagues explore the relationship between toddler bedtime routines and various sleep outcomes in low-income minority families in the United States.<sup>6</sup> They further investigated, and identified, a range of maternal and household characteristics associated with toddler sleep duration, comparing mothers who did and did not implement bedtime routines for their toddlers. One hundred and eighteen biological mothers of toddlers were recruited from hospitals and clinics in Baltimore. Mothers responded to the Brief Infant Sleep Questionnaire (BISQ) about daytime and nighttime sleep behaviors pertaining to two weeks prior to study participation. Information about the frequency of implementing a bedtime routine, room/bed sharing, number of night awakenings,

amount and frequency of night awakenings as well as average estimated bed and wake times was obtained from the mother about her child. Depressive symptoms for the mother were also acquired using a three-item scale. Furthermore, questionnaires were administered to collect data on food, energy and housing insecurity.

Strengths of the study include data acquisition from a population which is hard-to-reach, vulnerable and potentially difficult to engage in research. Thus, knowledge and evidence surrounding bedtime routines in these populations are currently limited. The study therefore adds value and understanding about sleep and bedtime routines of low-income, minority mothers with young children. In particular, the study found that 55% of mothers implemented a bedtime routine, and the most frequently reported behaviors included giving their child a bath, allowing them to watch television, and having dinner/snack before bedtime. On average, toddlers sleep duration per 24 hours was 10.8 hours. This is consistent with recommendations where the consensus is 11–14 hours for children aged 1–2 years and 10–13 hours per 24-hour period for 3–5 year-old children.<sup>7</sup> A significant direct relationship was not observed between the frequency of employing a bedtime routine and sleep duration in the sample but in a series of mediation models, it was found that each night time awakening was significantly associated with a 38-minute decrease in nocturnal sleep duration. Moreover, the authors reported that the frequency of night time awakenings was a mediator of the relationship between implementation of bedtime routines and night time sleep duration. Specifically, for each additional night that mothers practiced a bedtime routine, nocturnal sleep duration was extended by 5 minutes, through the effect of reduced nighttime awakenings. A particularly important finding pertains to mothers who screened positive for depressive symptoms ( $n = 34$ ), where the majority (61.8%) did not employ a bedtime routine,  $P < .05$ . Furthermore, significantly higher proportions of mothers with food (60.2%) and housing security (61.2%) practiced nightly bedtime routines with their offspring compared to those who did not implement a night routine.

While the effect sizes and sample are relatively small and data were self-reported, the message and implications are important and extend well beyond low-income, minority parents. Those in the scientific community, as well as health care

professionals and academic systems, should take note of the findings as well as action. No harm is likely to arise from incorporating sleep training into education and after-care programs that target postpartum populations. This may help to better educate parents about the importance of a consistent night time routine as well as monitoring mental health outcomes in new mothers. Depressive symptoms in low-income, minority mothers are considerably greater than higher-income counterparts and may compromise parenting duties and bonding.<sup>8</sup> Thus, it is fundamental that this vulnerable group be identified and provided with the necessary support to ensure the child's welfare, health and wellbeing is addressed. Given the importance of sleep in children, and the fundamental role that mothers play in their offspring's sleep-related behavior and routines, it is crucial to ensure stability across household and maternal characteristics. The scientific community should obtain data from single parents, as well as dual-working families, to further investigate the role of poverty in this field.

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Arora T. Sleep routines in children. *J Clin Sleep Med*. 2019;15(6):821–822.

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## SUBMISSION & CORRESPONDENCE INFORMATION

Submitted for publication May 9, 2019

Submitted in final revised form May 9, 2019

Accepted for publication May 10, 2019

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## DISCLOSURE STATEMENT

The author reports no conflicts of interest.